



RECEIVED  
JUL 17 2002  
TECH CENTER 1600/2900

PAGE:  
06/06/2002

VERIFICATION SUMMARY REPORT

DATE:

PATENT APPLICATION

TIME:

17:40:08

INPUT SEQ: A:\1962-4050US1.txt

GENERAL INFORMATION SECTION

-----  
3,<110> Bay, Sylvie  
4, Cantacuzene, Daniele  
5, Leclerc, Claude  
6, Lo-Man, Richard  
8,<120> MULTIPLE ANTIGEN GLYCOPEPTIDE CARBOHYDRATE,  
9, VACCINE COMPRISING THE SAME AND USE THEREOF  
11,<130> 102.166A-1  
13,<140> 09/405,986  
14,<141> 1999-09-27  
16,<150> US 09/049,847  
17,<151> 1998-03-27  
19,<150> US 60/041,726  
20,<151> 1997-03-27  
22,<160> 25  
24,<170> PatentIn version 3.1

ERRORED LINES SECTION

-----  
W--> 115 Xaa Lys Xaa Val Ala Ala Trp Thr Leu Lys Ala Ala Xaa

STATISTICS SUMMARY

-----  
Application Serial Number: 09/405,986  
Alpha or Numeric: Numeric  
Application Class:  
Application File Date: 1999-09-27  
Art Unit:  
Software Application: PatentIN3.1  
Total Number of Sequences: 25  
Total Nucleotides: 0  
Total Amino Acids: 348  
Number of Errors: 0  
Number of Warnings: 1  
Number of Corrections: 0



## SEQUENCE LISTING

<110> Bay, Sylvie  
Cantacuzene, Daniele  
Leclerc, Claude  
Lo-Man, Richard

<120> MULTIPLE ANTIGEN GLYCOPEPTIDE CARBOHYDRATE,  
VACCINE COMPRISING THE SAME AND USE THEREOF

<130> 102.166A

<140> 09/405,986

<141> 1999-09-27

<150> US 09/049,847

<151> 1998-03-27

<150> US 60/041,726

<151> 1997-03-27

<160> 25

<170> PatentIn version 3.1

<210> 1

<211> 15

<212> PRT

<213> Clostridium tetani

<400> 1

Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu  
1 5 10 15

<210> 2

<211> 21

<212> PRT

<213> Clostridium tetani

<400> 2

Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys Val Ser  
1 5 10 15

Ala Ser His Leu Glu  
20

<210> 3

<211> 12

<212> PRT

<213> Clostridium tetani

<400> 3

Gly Gln Ile Gly Asn Asp Pro Asn Arg Asp Ile Leu  
1 5 10

<210> 4

<211> 13

<212> PRT

<213> Poliovirus

<400> 4

Lys Leu Phe Ala Val Trp Lys Ile Thr Tyr Lys Asp Thr  
1 5 10

<210> 5

<211> 15

<212> PRT

<213> Escherichia coli

<400> 5

Asn Gly Lys Leu Ile Ala Tyr Pro Ile Ala Val Glu Ala Leu Ser  
1 5 10 15

<210> 6

<211> 13

<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

<223> Designed peptidic T-Helper Cell epitope that typically binds to a plurality of human and murine Major Histocompatibility Complex Class II molecules

HI  
<220>

<221> MISC\_FEATURE

<222> (1)..(1)

<223> Xaa=D-Ala

<220>

<221> MISC\_FEATURE

<222> (3)..(3)

<223> Xaa=L-cyclohexyl-Ala

<220>

<221> MISC\_FEATURE

<222> (13)..(13)

<223> Xaa=D-Ala

<400> 6

Xaa Lys Xaa Val Ala Ala Trp Thr Leu Lys Ala Ala Xaa  
1 5 10

<210> 7

<211> 10

<212> PRT

<213> Human papillomavirus type 16

<220>

<221> MISC\_FEATURE

<223> HPV16 E7 PEPTIDE

<400> 7

Thr Asp Leu Tyr Cys Tyr Glu Gln Leu Asn  
1 5 10

<210> 8  
<211> 10  
<212> PRT  
<213> Human papillomavirus type 16

<220>  
<221> MISC\_FEATURE  
<223> HPV16 E7 PEPTIDE

<400> 8

Ala Glu Pro Asp Arg Ala His Tyr Asn Ile  
1 5 10

<210> 9  
<211> 19  
<212> PRT  
<213> Human papillomavirus type 16

<220>  
<221> MISC\_FEATURE  
<223> HPV 16 E7 PEPTIDE

41  
<400> 9

Lys Cys Asp Ser Thr Leu Arg Leu Cys Val Gln Ser Thr His Val Ile  
1 5 10 15

Arg Thr Leu

<210> 10  
<211> 10  
<212> PRT  
<213> Human papillomavirus type 16

<220>  
<221> MISC\_FEATURE  
<223> HPV16 E7 PEPTIDE

<400> 10

Gly Thr Leu Gly Ile Val Cys Pro Ile Cys  
1 5 10

<210> 11  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 11

Lys Leu Val Val Val Gly Ala Arg Gly Val Gly Lys Ser  
1 5 10

<210> 12  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 12

His Leu Asp Met Leu Arg His Leu Tyr Gln Gly Cys Gln Val Val  
1 5 10 15

<210> 13  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 13

Ser Arg Leu Leu Gly Ile Cys Leu Thr Ser Thr Val Gln Leu Val  
1 5 10 15

<210> 14  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 14

Leu Leu Lys Tyr Arg Ala Arg Glu Pro Val Thr Lys Ala Glu  
1 5 10

<210> 15  
<211> 10  
<212> PRT  
<213> POLIOVIRUS

<400> 15

Phe Ala Val Trp Lys Ile Thr Tyr Lys Asp  
1 5 10

<210> 16  
<211> 14  
<212> PRT  
<213> Clostridium tetani

<400> 16

Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu  
1 5 10

<210> 17  
<211> 11  
<212> PRT  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> Designed synthetic linear glycopeptide containing a saccharidic  
B-cell epitope and a CD4+ T-cell epitope able to induce anti-

saccharidic antibodies

<400> 17

Ser Thr Thr Gly Gly Gly Gly Gly Gly Lys Gly  
1 5 10

<210> 18

<211> 11

<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

<223> Designed synthetic linear glycopeptide containing a saccharidic  
B-cell epitope and a CD4+ T-cell epitope able to induce anti-  
saccharidic antibodies

<220>

<221> MISC\_FEATURE

<222> (1)..(1)

<223> alpha-N-acetylgalactosamine (GalNAc)-Serine

<220>

<221> MISC\_FEATURE

<222> (2)..(3)

<223> alpha-N-acetylgalactosamine (GalNAc)-Threonine

41  
<400> 18

Ser Thr Thr Gly Gly Gly Gly Gly Gly Lys Gly  
1 5 10

<210> 19

<211> 11

<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

<223> Designed synthetic linear glycopeptide containing a saccharidic  
B-cell epitope and a CD4+ T-cell epitope able to induce anti-  
saccharidic antibodies

<220>

<221> MISC\_FEATURE

<222> (1)..(1)

<223> alpha-N-acetylgalactosamine (GalNAc)-Serine

<220>

<221> MISC\_FEATURE

<222> (2)..(3)

<223> alpha-N-acetylgalactosamine (GalNAc)-Threonine

<220>

<221> MISC\_FEATURE

<222> (10)..(10)

<223> Biotinylated

<400> 19

Ser Thr Thr Gly Gly Gly Gly Gly Lys Gly  
1 5 10

<210> 20  
<211> 11  
<212> PRT  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> Designed synthetic linear glycopeptide containing a saccharidic B-cell epitope and a CD4+ T-cell epitope able to induce anti-saccharidic antibodies

<220>  
<221> MISC\_FEATURE  
<222> (7)..(8)  
<223> alpha-N-acetylgalactosamine (GalNAc)-Threonine

<400> 20

Lys Gly Gly Gly Gly Ser Thr Thr Gly Gly Gly  
1 5 10

41  
<210> 21  
<211> 14  
<212> PRT  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> Designed synthetic linear glycopeptide containing a saccharidic B-cell epitope and a CD4+ T-cell epitope able to induce anti-saccharidic antibodies

<220>  
<221> MISC\_FEATURE  
<222> (1)..(1)  
<223> alpha-N-acetylgalactosamine (GalNAc)-Serine

<400> 21

Ser Lys Leu Phe Ala Val Trp Lys Ile Thr Tyr Lys Asp Thr  
1 5 10

<210> 22  
<211> 16  
<212> PRT  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> Designed synthetic linear glycopeptide containing a saccharidic B-cell epitope and a CD4+ T-cell epitope able to induce anti-saccharidic antibodies

<220>  
<221> MISC\_FEATURE  
<222> (1)..(1)  
<223> alpha-N-acetylgalactosamine (GalNAc)-Serine

<220>  
<221> MISC\_FEATURE  
<222> (2)..(3)  
<223> alpha-N-acetylgalactosamine (GalNAc)-Threonine

<400> 22

Ser Thr Thr Lys Leu Phe Ala Val Trp Lys Ile Thr Tyr Lys Asp Thr  
1 5 10 15

<210> 23  
<211> 16  
<212> PRT  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> Designed synthetic linear glycopeptide containing a saccharidic  
B-cell epitope and a CD4+ T-cell epitope able to induce anti-  
saccharidic antibodies

<220>  
<221> MISC\_FEATURE  
<222> (1)..(3)  
<223> alpha-N-acetylgalactosamine (GalNAc)-D-Serine

411  
<400> 23

Ser Ser Ser Lys Leu Phe Ala Val Trp Lys Ile Thr Tyr Lys Asp Thr  
1 5 10 15

<210> 24  
<211> 22  
<212> PRT  
<213> ARTIFICIAL SEQUENCE

<220>  
<223> Designed synthetic linear glycopeptide containing a saccharidic  
B-cell epitope and a CD4+ T-cell epitope able to induce anti-  
saccharidic antibodies

<220>  
<221> MISC\_FEATURE  
<222> (1)..(1)  
<223> alpha-N-acetylgalactosamine (GalNAc)-Serine

<220>  
<221> MISC\_FEATURE  
<222> (2)..(3)  
<223> alpha-N-acetylgalactosamine (GalNAc)-Threonine

<220>  
<221> MISC\_FEATURE  
<222> (4)..(4)  
<223> alpha-N-acetylgalactosamine (GalNAc)-Glycine

<220>  
<221> MISC\_FEATURE  
<222> (5)..(5)



<223> alpha-N-acetylgalactosamine (GalNAc)-Serine

<220>

<221> MISC\_FEATURE

<222> (6)..(7)

<223> alpha-N-acetylgalactosamine (GalNAc)-Threonine

<220>

<221> MISC\_FEATURE

<222> (8)..(8)

<223> alpha-N-acetylgalactosamine (GalNAc)-Glycine

<400> 24

Ser Thr Thr Gly Ser Thr Thr Gly Lys Leu Phe Ala Val Trp Lys Phe  
1 5 10 15

Ile Thr Tyr Lys Asp Thr  
20

<210> 25

<211> 17

<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

<223> Designed synthetic linear glycopeptide containing a saccharidic B-cell epitope and a CD4+ T-cell epitope able to induce anti-saccharidic antibodies

<220>

<221> MISC\_FEATURE

<222> (1)..(1)

<223> alpha-N-acetylgalactosamine (GalNAc)-Serine

<220>

<221> MISC\_FEATURE

<222> (2)...(3)

<223> alpha-N-acetylgalactosamine (GalNAc)-Threonine

<400> 25

Ser Thr Thr Gln Tyr Ile Lys Ala Asn Ser Lys Ile Gly Ile Thr Glu  
1 5 10 15

Leu